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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,018	12/31/2001	E. David Neufeld	H052617.1132US0	8143

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EXAMINER	
LI, ZHUO H	
ART UNIT	**PAPER NUMBER**
2185	

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/039,018	NEUFELD ET AL	
	Examiner	Art Unit	
	Zhuo H. Li	2185	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 August 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) *20-27* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19 and 28-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8/8/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Office action is in response to the amendment filed 8/8/2005. Accordingly, claims 20-27 are canceled and claims 1-19 and 28-31 are pending for examination.

Information Disclosure Statement

2. The information disclosure statement filed 8/8/2005 has been considered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kriegsman (US PAT. 6,480,893) in view of Lofgren et al. (US PAT. 6,230,233 hereinafter Lofgren).

Regarding claim 1, Kriegsman disclose a method comprising the step of identifying whether a file (40 or 42, figure 1) on a read/write storage medium (30, figure 1) is a static file or a dynamic file and migrating the file to a secondary server based on the whether the file is a static file or not (abstract, col. 5 line 52 through col. 6 line 17 and col. 6 line 65 through col. 7 line 19). Kriegsman differs from the claimed invention in not specifically teaching migrating the file to a dynamic region of the read/write storage medium if the file is a static file, and migrating the file to a static region of the read/write storage medium if the file is a dynamic file. However, Lofgren teaches a computer system comprising flash electrically erasable and programmable read only memory (11, figure 1), i.e., read/write storage medium, is divided into a plurality of memory banks for data storage (col. 3 lines 16-28 and col. 6 lines 23-55), which in respond to the memory operation from/to the micro-processor (17, figure 1) via the memory controller (13, figure 1), and the memory controller is further manages operation of the EEPROM memory in a way to maximize the lifetime of the memory system by avoiding uneven use of any one part of it (col. 3 lines 3-15). In addition, Lofgren teaches the EEPROM memory is further calculate the rewrite cycle of the each bank wherein the EEPROM memory is divided into most heavily used bank, i.e., dynamic region, and least used bank, i.e., static region, by the result of the calculation based on the rewrite/erase cycle, and data is transferred between the most heavily used and least used banks in the way of swapping the data in between of these banks (col. 4 line 46 through col. 5 line 31 and figure 5). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the read/write storage medium of Kriegaman in

having the steps of migrating the file to a dynamic region of the read/write storage medium if the file is a static file and migrating the file to a static region of the read/write storage medium if the file is a dynamic file, as per teaching by the storage system of Lofgren, because it allows for extending overall memory system lifetime without having to provide any replacement groups of the memory cells which maximize the lifetime of the memory system by avoiding uneven use of any one part of the memory system.

Regarding claim 2, Lofgren discloses the method of counting a number of rewrite cycles of the file via the cycle count field (73, figure 4) in header portion (col. 6 line 56 through col. 7 line 28).

Regarding claim 3, Lofgren discloses the method of comparing the number of rewrite cycles of the file to a predetermined rewrite cycle threshold (col. 5 lines 56-65).

Regarding claims 4-5, Lofgren discloses the predetermined rewrite cycle threshold is associated with a read/write storage medium identifier and a drive identifier for the read/write storage medium (col. 4 lines 1 1-31).

Regarding claim 6, Lofgren discloses the method wherein the predetermined rewrite cycle threshold is based on self-testing by performing rewrite cycles to a data block of the read/write storage medium until the data block is unstable (col. 4 lines 12-61 and col. 6 line 56 through col. 7 line 62).

Regarding claims 7-8, Lofgren discloses the method wherein the predetermined rewrite cycle threshold and the number of rewrite cycles of the file are stored in a file allocation table (col. 4 lines 32-61).

Regarding claims 9-11, the difference between Lofgren and the claimed invention is the claims specifically recite the read/write storage medium comprises a compact disk read/write disk, a tape drive, a floppy disk drive. However, having this vary type of memory does not have a disclosed purpose nor is this kind of the memories disclosed to overcome any deficiencies in the prior art. As such, the read/write medium may have been of any kind of the memory. In addition, since Lofgren discloses the read/write medium is a flash electrically erasable and programmable read only memory (col. 1 lines 5-19 and col. 3 lines 5-28), the ordinary artisan would realize a possible kind of the memories can be applied as the current technology would warrant. Accordingly, it would have been an obvious matter of design choice to utilize the storage system of Lofgren wherein the read/write storage medium is a flash electrically erasable and programmable read only memory as disclosed supra, since applicant has not disclosed that a flash electrically erasable and programmable read only memory as opposed to other kind of memories, overcomes a deficiency in the prior art or is for any stated purpose.

Regarding claim 12, Lofgren discloses the method wherein the read/write storage medium comprises an electrically erasable medium, i.e., flash electrically erasable and programmable read only memory (col. 1 lines 5-19 and col. 3 lines 5-28).

Regarding claim 13, the limitations of the claim are rejected as the same reasons set forth in claim 1.

Regarding claim 14, the limitations of the claim are rejected as the same reasons set forth in claim 2.

Regarding claim 15, the limitations of the claim are rejected as the same reasons set forth in claim 3.

Regarding claim 16, Kriegsman discloses the file system comprising means for identifying a file type of the file, wherein the file is initially identified as static or dynamic based on the file type of the file (col. 5 line 58 through col. 6 line 5 and col. 6 line 67 through col. 7 line 32).

Regarding claim 17, Kriegsman discloses a computer system comprising a processor-executable file system (28, figure 1) adapted to identify whether a file on a read/write storage medium (30, figure 1) is a static file or a dynamic file, and migrating the file to a secondary server in response to identifying the file as a static file or not (abstract, col. 5 line 52 through col. 6 line 17 and col. 6 line 65 through col. 7 line 19). Kriegsman differs from the claimed invention in not specifically teaching the system comprising a processor-executable file system adapted to migrate the file to a dynamic region of the read/write storage medium, and migrating the file to a static region of the read/write storage medium. However, Lofgren teaches the computer system comprising a micro-processor (17, figure 1) to execute the memory access to the flash electrical erasable and programmable read only memory, i.e., read/write medium via the memory controller (13, figure 1), wherein the EEPROM is divided into a plurality of memory banks for data storage (col. 3 lines 16-28 and col. 6 lines 23- 55), and the memory controller is further manages operation of the EEPROM memory in a way to maximize the lifetime of the memory system by avoiding uneven use of any one part of it (col. 3 lines 3-15). In addition Lofgren teaches the EEPROM memory is further calculate the rewrite cycle of the each bank wherein the EEPROM memory is divided into most heavily used bank, i.e., dynamic region, and least used bank, i.e., static region, by the result of the calculation of the rewrite/erase cycle, and data is transferred between the most heavily used and least used banks in the way of swapping the data

in between of these banks (col. 4 line 46 through col. 5 line 31 and figure 5). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the storage system of Kriegsman in having a processor-executable file system adapted to migrate the file to a dynamic region of the read/write storage medium, and migrating the file to a static region of the read/write storage medium, as per teaching by the storage system of Lofgren, because it allows for extending overall memory system lifetime without having to provide any replacement groups of the memory cells which maximize the lifetime of the memory system by avoiding uneven use of any one part of the memory system.

Regarding claim 18, the limitations of the claim are rejected as the same reasons set forth in claim 2.

Regarding claim 19, the limitations of the claim are rejected as the same reasons set forth in claim 3.

Regarding claim 28, the limitations of the claim are rejected as the same reasons set forth in claim 16.

Regarding claim 29, the limitations of the claim are rejected as the same reasons set forth in claim 15.

Regarding claim 30, the limitations of the claim are rejected as the same reasons set forth in claim 2.

Regarding claim 31, the limitations of the claim are rejected as the same reasons set forth in claim 15.

Response to Arguments

5. Applicant's arguments with respect to claims 1-19 and 28-31 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nishiyama (JP 09160976A) discloses a system for managing operation program to make possible change the constitution of operation by managing static attribute information and the dynamic characteristic information of objects (abstract).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zhuo H. Li whose telephone number is (571) 272-4183. The examiner can normally be reached on Tue-Fri 7:30 AM-5:00 PM, and alternate Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Zhuo H. Li
Patent Examiner
Art Unit 2185

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PRIMARY EXAMINER